

WESTGenerate CollectionPrint

L10: Entry 1 of 4

File: USPT

Oct 15, 2002

DOCUMENT-IDENTIFIER: US 6466951 B1

TITLE: Data base synchronizing system with at least two host databases and a remote database

Brief Summary Text (5):

U.S. Pat. No. 5,729,735 discloses a computer database system having a master database in a master computer and multiple remote databases in portable computers. The remote databases are initially created by copying data from the master database. For each remote database thus created, the system also creates a backup file, which is stored in the master computer and reflects contents of each remote database, when this was created or last synchronized. For time to time, the system synchronizes data in the master database with one of the remote databases. To this end, the system compares corresponding data in the master database, the remote database and the backup file to determine which database (remote or master) that has a more current version of the data. The system then updates the database that has the less current data with data from the database that has the more current data. After having synchronized the databases, the system copies all data from the remote database to the backup file.

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Generate Collection

L13: Entry 1 of 36

File: USPT

Nov 19, 2002

DOCUMENT-IDENTIFIER: US 6484204 B1

TITLE: System and method for allocating requests for objects and managing replicas of objects on a network

Detailed Description Text (89):

Objects in the first category can change only as result of updates by the content provider. Consistency of these updates can be maintained by using the primary copy approach, with the node hosting the original copy of the object acting as the primary. Depending on the needs of the application, updates can propagate from the primary asynchronously to the rest of the currently existing replicas either immediately or in batches using epidemic mechanisms. These objects can be replicated or migrated freely, with the provision that either the primary copy of an object never migrates or the location of the primary copy is tracked by the redirection module. In the case of batched update propagation, techniques used in Web caching to prevent (or bound) staleness of cached copies (see, e.g., Alex adaptive copy expiry (see Cate, Alex, A Global File System, in Proc. 1992 USENIX File System Workshop, pp. 1-12, 1992) and piggybacked validation (see B. Krishnamurthy and C. E. Wills, Study of Piggyback Cache Validation for Proxy Caches in the World Wide Web, in Proc. USENIX Symp. on Internet Technologies and Systems}, pp. 1-12, December 1997) can also be used here to prevent serving stale content to clients. Multiple studies have shown that an overwhelming majority (over 90%) of Web object accesses are to this category of objects.

WEST

Freeform Search

Database:

US Patents Full-Text Database

US Pre-Grant Publication Full-Text Database

JPO Abstracts Database

EPO Abstracts Database

Derwent World Patents Index

IBM Technical Disclosure Bulletins

Term:

Display:

10

Documents in

Display Format:

TI

Starting with Number

1

Generate:

☐ Hit List

☒ Hit Count

☐ Side by Side

☐ Image

Search

Clear

Help

Logout

Interrupt

Main Menu

Show S Numbers

Edit S Numbers

Preferences

Cases

Search History

DATE: Tuesday, December 03, 2002 [Printable Copy](#) [Create Case](#)

Set Name Query

side by side

Hit Count Set Name

result set

DB=USPT; PLUR=YES; OP=ADJ

| | | | |
|------------|--|------|------------|
| <u>L13</u> | L9 same (web or internet) | 36 | <u>L13</u> |
| <u>L12</u> | L11 same (web or internet) | 19 | <u>L12</u> |
| <u>L11</u> | L9 same (computer or server) | 339 | <u>L11</u> |
| <u>L10</u> | L9 same (master computer or central server) | 4 | <u>L10</u> |
| <u>L9</u> | (propogat\$6 or replicat\$ or copy\$3)near5 (primary or main or master or source) same (change or modification or update) | 1920 | <u>L9</u> |
| <u>L8</u> | (propogat\$6 or replicat\$ or copy\$3) near5 (primary or main or master or source) same (change or modification or update) | 1920 | <u>L8</u> |
| <u>L7</u> | (propogat\$6 or replicat\$ or copy\$3) near5 (primary or main or master or source) same (change or modification or update) | 1920 | <u>L7</u> |
| <u>L6</u> | l4 same (master computer or central server) | 2 | <u>L6</u> |
| <u>L5</u> | l4 same (central or master) near3 (computer or server) | 7 | <u>L5</u> |
| <u>L4</u> | (propogat\$6 or replicat\$ near5(primary or main master or source) same (change or modification or update)) | 3850 | <u>L4</u> |
| <u>L3</u> | replicat\$ near5(master or source) near3 (copy or file) | 91 | <u>L3</u> |
| <u>L2</u> | 6182117 | 3 | <u>L2</u> |
| <u>L1</u> | 6181117 | 1 | <u>L1</u> |

END OF SEARCH HISTORY

WEST☐ Generate Collection☐ Print

L1: Entry 92 of 136

File: USPT

Jul 13, 1999

US-PAT-NO: 5924096

DOCUMENT-IDENTIFIER: US 5924096 A

TITLE: Distributed database using indexed into tags to tracks events according to type, update cache, create virtual update log on demand

DATE-ISSUED: July 13, 1999

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|--------------------|-------------|-------|----------|---------|
| Draper; Stephen PW | Basingstoke | | | GBX |
| Lowry; Dale A | Provo | UT | | |

US-CL-CURRENT: 707/10; 707/101, 707/2, 707/201, 707/203, 707/511

ABSTRACT:

Methods and systems are provided for synchronizing local copies of a distributed database, such as a master copy and a partial copy stored in a replica or in a cache. Each data item in the database has an associated timestamp or other tag. An index into the tags is maintained. The tag index may be used to create an event list to reduce the time and bandwidth needed to synchronize the local copies. The tag index may also be used to create a virtual update log, thereby removing the need to maintain one or more physical logs recording the history of the copies.

32 Claims, 6 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4